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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/994,840

11/28/2001

Jang Geun Oh

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7590

08/05/2003

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EXAMINER

DESTA, ELIAS

ART UNIT

PAPER NUMBER

2857

DATE MAILED: 08/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/994,840

Applicant(s)

OH, JANG GEUN

Examiner

Elias Desta

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 16-18 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-14 is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 2-4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application):
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

Detailed Action

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "Power Saving Method and Apparatus for a Portable Appliance"

Claim rejection – 35 U.S.C. 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1 is rejected under 35 U.S.C. 102(b) as anticipated by Watanabe (U.S. 5,737,616).

In reference to claim 1: Watanabe teaches a power saving method in an appliance (devices) (see Watanabe, Fig. 1 and column 1, lines 18-23). The method includes:

- Inputting power management data (power supply mode) into a user setup menu (it is inherent that most operating system have some sort of user setup menu for power setting that can be shown on the computer's

monitor) on a display associated with the appliance (computer) (see Watanabe, column 5, lines 15-43);

- Outputting control command to a micro-controller based on the power management data (see Watanabe, Fig. 1, signal from CPU, 11 to power supply control register, 14); and
- Executing the power control command of the micro-controller (see Watanabe, Fig. 1, CPU, 11 executes the power control command) where the execution includes disconnecting battery power from the selected one of plurality devices in the appliance (see Watanabe, Fig 1, block 2 and column 6, lines 14-31).

Claim Objection

4. Claims 2-4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Allowable Subject Matter

5. Claims 5-14 are allowable over the prior art of record.

In reference to claim 5: Watanabe teaches a power saving method in a portable appliance (see Watanabe, Abstract). The method includes:

- Checking respective devices in the portable appliance (see Watanabe, Fig. 1 and column 4, lines 14-34);

However Watanabe does not teach:

- Displaying checked information for a respective device in a user set up menu when the power level drops below a certain threshold;
- Outputting a control command to a micro-controller based on power saving data; and
- Executing power saving program in accordance with a control command from the micro-controller.

Whereas, the claimed invention includes all the features noted above and further provides a means for checking the remaining capacity of the battery with respect to each installed portable appliance and frequency of use of the respective devices.

Other prior art made of record:

- Tanaka (Power Semiconductor Symposium Article, "Environment Friendly Revolution in Home Appliances") teaches an overview of conservation of electrical energy for home appliances (see Tanaka, page 91, Abstract and Introduction). The technology allows optimal energy conservation on the appliance level, but does not further monitor the power consumption of the

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devices with in the home appliance, such as timers, electromechanical devices and other electrical devices.

- Knoblock et al. (U.S. Patent 5,930,779) teaches a web based system and method to automate storage of power plant data and calculation of battery reserves (see Knoblock et al., Abstract). The power distribution and monitoring is done per consumer equipment. The system has a capability to switch of individual appliances at customer site without being physically present.
- Jamieson et al. (U.S. Patent 5,196,781) teaches method and apparatus for power control of solar powered display devices (see Jamieson et al., Abstract). The method includes powering the devices at lower light intensity and when no solar energy is available the system would switch to an economical auxiliary battery. The system has a witching capability during low power drop out but does not constitute a functional representation of the claimed invention.

The remaining claims are dependent upon claim 5 and contain further limitations.

Response to Applicant's Traversal of Restriction

6. Applicant's election with traverse of claims 1-14 (Group I) in Paper No. 7 is acknowledged. The traversal is on the ground(s) that the designated inventions is

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sufficiently related that a thorough search for the subject matter of each of the designated inventions (Groups I and II) would encompass a search for the subject matter of the remaining designated invention (Group II, claims 15-18). However, this is not found persuasive because inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require that particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP 806.05 (C)).

In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the two inventions can have distinct industrial applicability:

- Claims 1-14 are drawn to power saving method of a portable appliance, classified as 702/57 (e.g. a laptop computer with staged screen saving and power shut off modes), and
- Claims 15-18 are drawn to power saving apparatus in an appliance classified as 318/139 (e.g. power management in gas/electric hybrid engines).

Claims 15-18 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected subject matter, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election)

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requirement in Paper No. 6. The requirement is still deemed proper and is therefore made FINAL.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elias Desta whose telephone number is (703)-305-3840. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (703)-308-1677. The fax phone numbers for the organization where this application or proceeding is assigned are (703)-308-5841 for regular communications and (703)-308-5841 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-1782.

Elias Desta
Examiner
Art Unit 2857

-ed

July 23, 2003


MARC S. HOFF
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800